

## SEQUENCE LISTING

<110> National Institute of Advanced Industrial Science

<120> Expression vector for fused gene and Method for  
producing immobilized enzyme

<130> PH-1407

<140>

<141>

<150> JP2000/354396

<151> 2000-11-21

<150> JP2001/190524

<151> 2001-06-22

<160> 14

<170> PatentIn Ver. 2.1

<210> 1

<211> 341

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 1

Met Gln Tyr Lys Lys Ser Leu Val Ala Ser Ala Leu Val Ala Thr Ser  
1 5 10 15

Leu Ala Ala Tyr Ala Pro Lys Asp Pro Trp Ser Thr Leu Thr Pro Ser  
20 25 30

Ala Thr Tyr Lys Gly Gly Ile Thr Asp Tyr Ser Ser Thr Phe Gly Ile  
35 40 45

0988975.1.2101

Ala Val Glu Pro Ile Ala Thr Thr Ala Ser Ser Lys Ala Lys Arg Ala  
 50 55 60

Ala Ala Ile Ser Gln Ile Gly Asp Gly Gln Ile Gln Ala Thr Thr Lys  
 65 70 75 80

Thr Thr Ala Ala Ala Val Ser Gln Ile Gly Asp Gly Gln Ile Gln Ala  
 85 90 95

Thr Thr Lys Thr Lys Ala Ala Ala Val Ser Gln Ile Gly Asp Gly Gln  
 100 105 110

Ile Gln Ala Thr Thr Lys Thr Thr Ser Ala Lys Thr Thr Ala Ala Ala  
 115 120 125

Val Ser Gln Ile Gly Asp Gly Gln Ile Gln Ala Thr Thr Lys Thr Lys  
 130 135 140

Ala Ala Ala Val Ser Gln Ile Gly Asp Gly Gln Ile Gln Ala Thr Thr  
 145 150 155 160

Lys Thr Thr Ala Ala Ala Val Ser Gln Ile Gly Asp Gly Gln Ile Gln  
 165 170 175

Ala Thr Thr Lys Thr Thr Ala Ala Ala Val Ser Gln Ile Gly Asp Gly  
 180 185 190

Gln Ile Gln Ala Thr Thr Asn Thr Thr Val Ala Pro Val Ser Gln Ile  
 195 200 205

Thr Asp Gly Gln Ile Gln Ala Thr Thr Leu Thr Ser Ala Thr Ile Ile  
 210 215 220

Pro Ser Pro Ala Pro Ala Pro Ile Thr Asn Gly Thr Asp Pro Val Thr  
 225 230 235 240

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Ala Glu Thr Cys Lys Ser Ser Gly Thr Leu Glu Met Asn Leu Lys Gly  
 245 250 255

Gly Ile Leu Thr Asp Gly Lys Gly Arg Ile Gly Ser Ile Val Ala Asn  
 260 265 270

Arg Gln Phe Gln Phe Asp Gly Pro Pro Pro Gln Ala Gly Ala Ile Tyr  
 275 280 285

Ala Ala Gly Trp Ser Ile Thr Pro Glu Gly Asn Leu Ala Ile Gly Asp  
 290 295 300

Gln Asp Thr Phe Tyr Gln Cys Leu Ser Gly Asn Phe Tyr Asn Leu Tyr  
 305 310 315 320

Asp Glu His Ile Gly Thr Gln Cys Asn Ala Val His Leu Gln Ala Ile  
 325 330 335

Asp Leu Leu Asn Cys  
 340

<210> 2

<211> 413

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 2

Met Gln Tyr Lys Lys Thr Leu Val Ala Ser Ala Leu Ala Ala Thr Thr  
 1 5 10 15

Leu Ala Ala Tyr Ala Pro Ser Glu Pro Trp Ser Thr Leu Thr Pro Thr  
 20 25 30

Ala Thr Tyr Ser Gly Gly Val Thr Asp Tyr Ala Ser Thr Phe Gly Ile

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35	40	45
Ala Val Gln Pro Ile Ser Thr Thr Ser Ser Ala Ser Ser Ala Ala Thr		
50	55	60
Thr Ala Ser Ser Lys Ala Lys Arg Ala Ala Ser Gln Ile Gly Asp Gly		
65	70	75 80
Gln Val Gln Ala Ala Thr Thr Thr Ala Ser Val Ser Thr Lys Ser Thr		
85	90	95
Ala Ala Ala Val Ser Gln Ile Gly Asp Gly Gln Ile Gln Ala Thr Thr		
100	105	110
Lys Thr Thr Ala Ala Ala Val Ser Gln Ile Gly Asp Gly Gln Ile Gln		
115	120	125
Ala Thr Thr Lys Thr Thr Ser Ala Lys Thr Thr Ala Ala Ala Val Ser		
130	135	140
Gln Ile Ser Asp Gly Gln Ile Gln Ala Thr Thr Thr Thr Leu Ala Pro		
145	150	155 160
Lys Ser Thr Ala Ala Ala Val Ser Gln Ile Gly Asp Gly Gln Val Gln		
165	170	175
Ala Thr Thr Thr Thr Leu Ala Pro Lys Ser Thr Ala Ala Ala Val Ser		
180	185	190
Gln Ile Gly Asp Gly Gln Val Gln Ala Thr Thr Lys Thr Thr Ala Ala		
195	200	205
Ala Val Ser Gln Ile Gly Asp Gly Gln Val Gln Ala Thr Thr Lys Thr		
210	215	220
Thr Ala Ala Ala Val Ser Gln Ile Gly Asp Gly Gln Val Gln Ala Thr		

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TOTAL 52668660

225		230		235		240
Thr Lys Thr Thr	Ala Ala Ala Val	Ser Gln Ile Gly	Asp Gly Gln Val			
	245	250	255			
Gln Ala Thr Thr	Lys Thr Thr	Ala Ala Ala Val	Ser Gln Ile Thr	Asp		
	260	265	270			
Gly Gln Val Gln	Ala Thr Thr	Lys Thr Thr	Gln Ala Ala	Ser Gln Val		
	275	280	285			
Ser Asp Gly Gln	Val Gln Ala Thr	Thr Thr Ala Thr	Ser Ala Ser Ala	Ala		
	290	295	300			
Ala Thr Ser Thr	Asp Pro Val	Asp Ala Val	Ser Cys Lys Thr	Ser Gly		
305	310	315	320			
Thr Leu Glu Met	Asn Leu Lys	Gly Gly Ile Leu	Thr Asp Gly Lys	Gly		
	325	330	335			
Arg Ile Gly Ser	Ile Val Ala	Asn Arg Gln Phe	Gln Phe Asp Gly	Pro		
	340	345	350			
Pro Pro Gln Ala	Gly Ala Ile	Tyr Ala Ala Gly	Trp Ser Ile Thr	Pro		
	355	360	365			
Asp Gly Asn Leu	Ala Ile Gly	Asp Asn Asp Val	Phe Tyr Gln Cys	Leu		
370	375	380				
Ser Gly Thr Phe	Tyr Asn Leu	Tyr Asp Glu His	Ile Gly Ser Gln	Cys		
385	390	395	400			
Thr Pro Val His	Leu Glu Ala	Ile Asp Leu Ile	Asp Cys			
	405	410				

0988975-112101

### <213> Artificial Sequence

<223> Description of Artificial Sequence:Artificial Sequence

44

### 〈213〉 Artificial Sequence

<223> Description of Artificial Sequence:Artificial Sequence

31

### ⟨213⟩ Artificial Sequence

<400> 5

ggggggcggc cgcatacca tacgatgttc ctgac

35

<210> 6

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificial  
Sequence

<400> 6

ggggcccggg ctaggatgat ggtttcaaaa gattttgaat atgatcc

47

<210> 7

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificial  
Sequence

<400> 7

cccgtcgaca atcctatctg cgtgtgtctc aagac

35

<210> 8

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificial

0999975.13101

## Sequence

&lt;400&gt; 8

cccctcgagt caggtgaacc aagccgctat gccgc

35

&lt;210&gt; 9

&lt;211&gt; 39

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Artificial  
Sequence

&lt;400&gt; 9

ggggggtcga cagcaatata ttccgagttc catctccgc

39

&lt;210&gt; 10

&lt;211&gt; 42

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Artificial  
Sequence

&lt;400&gt; 10

gggggctcga gctactcacg gaattttttc cagttttttg gc

42

&lt;210&gt; 11

&lt;211&gt; 38

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

0998975-112101



<220>

<223> Description of Artificial Sequence:Artificial  
Sequence

<400> 11

ggggggagct catgcaatac aaaaagactt tggttgcc 38

<210> 12

<211> 68

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificial  
Sequence

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ccccgcggc cgccttgca tcgtcatcct ttagtcaca gtctatcaaa tcgatagctt 60  
ccaagtgg 68

<210> 13

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificial  
Sequence

<400> 13

ggggggcggc cgcaaagat gcgcttatc gatcaagcaa tgtaaacag 49

099995.1240

<210> 14

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificial  
Sequence

<400> 14

gggggcccgg gctagcttgg ttcggtgcta gaatttc

38

09989975-112101  
"52668660"